

Amendment
USSN:09/966,202

Attorney Docket R0086B-DIV

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cont.
45. (new) The pharmaceutical composition of Claims 44, wherein said liquid spray device is an aerosol device.
46. (new) The pharmaceutical composition of Claim 45, wherein said aerosol device is a nebulizer or electrohydrodynamic aerosol device.
47. (new) The pharmaceutical composition of Claim 41, wherein the chronic obstructive pulmonary disease is emphysema, or chronic bronchitis.--

REMARKS

Claims 1, 6-22-47 are pending in the present application. Claims 2-5 have been canceled. Claims 36-47 are new. Applicants wish to thank Examiner George for withdrawing the restriction requirement and examining all remaining claims in the application. Applicants further wish to thank Examiner George for the courtesy of a telephone interview on January 29, 2003 in which the relevance of the Bollag disclosure to the instant claims was reviewed.

New claims 38, 40-47 recite compositions suitable for preventing or treating chronic obstructive pulmonary disease. The use of the 13-*cis*-retinoic acid for treating COPD was described in the specification on p. 4, lines 30-33. New dependent claims 36, 37, 39 add the limitation that the compositions are inhalation formulations. The use of inhalation formulations is disclosed in the specification on p. 5, lines 2-9 and examples 3-5 on p. 15, line 22 to p. 16, line 29 of the patent application.

Claim 11 also was amended to distinctly point out that the method claims compositions that alleviate one or more of the symptoms of emphysema. On p. 13, lines 14-17 a "therapeutically effective amount" is defined as the amount necessary to alleviate the symptoms of emphysema. Thus no new matter is introduced by this amendments.

Claims 12 and 13 were amended to correct improper dependencies and claims 29 and 30 were amended to correct typographical errors.

Claim 23 was objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to limit the subject matter of a previous claim. Claim 23 has been amended to correct the dependency.

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Claims 1-10, 21, 22 and 24-34 are rejected under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6,339,107 B1. In view of the telephone interview which concluded that the present claims appear to be in condition for allowance, a terminal disclaimer in accordance with 37 CFR § 1.321(c) over U.S. Patent No. 6,339,107 B1 is included herewith. The present application is a divisional of US 6,339,107 and patent and application are assigned to Syntex (U.S.A.) LLC.

Claims 11-25 and 35 are rejected under 35 U.S.C. §103(a) as being unpatentable over Bollag *et al.* (EP 0 579 915 A1). Bollag *et al.* teach pharmaceutical compositions containing 9-*cis*- or 13-*cis*-retinoic acid in combination with a Vitamin D derivative. The use of these compositions for treatment or prevention of tumors, pathological or undesired immune reactions, allergies asthma, psoriasis and osteoporosis are taught.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

MPEP 2143.02

Bollag does not teach the use of a *cis*-retinoic acid for treating emphysema or chronic obstructive pulmonary disease (COPD). These diseases are fundamentally different from all the diseases taught by Bollag. Bollag does not teach pulmonary administration of the compounds. Bollag teaches formulations for enteral, parenteral, oral and topical formulations. Bollag does not teach inhalation formulations. Moreover, Bollag teaches administration of combinations of retinoic acid and vitamin D derivatives.

No motivation to prepare pharmaceutical compositions, much less inhalation formulations, of *cis*-retinoic for treating emphysema or COPD exist in the prior art. Absent teaching of the use of *cis*-retinoic for treating emphysema or COPD there also is no expectation of success.

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To establish *prima facie* obviousness of a claimed invention all the claim limitations must be taught or suggested by the prior art. *In re Royka* 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words of a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson* 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

MPEP §2143.03

Claims 11 and 35 contain the limitations "suitable for treating a mammal suffering from emphysema" and "suitable for preventing emphysema". New claim 38 contains the limitation "composition for treating a mammal suffering from chronic obstructive pulmonary disease." The prior art neither teaches nor suggests these claim limitations.

Applicants respectfully submit that the requirements for a *prima facie* case have not been met and withdrawal of the rejection is respectfully requested.

CONCLUSION

Applicants believe the new and amended claims are in condition for allowance and favorable consideration and passage of the claims to issuance is respectfully requested. A clean copy of the claims is attached in the Appendix A. A clean copy of the amendment to the specification is attached in Appendix B.

The accompanying Fee Transmittal authorizes fee for terminal disclaimer under 37 CFR 1.20(d), and any additional fees, to be charged to Deposit Account 18-1700.

If the Examiner believes that an interview will advance prosecution or aid in the favorable consideration of this amendment, the Examiner is respectfully invited to contact the applicant's representative.

Respectfully submitted,



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